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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,252	11/27/2001	Lih-Jyh Weng	108047-0047	2978
24267	7590 04/22/2004		EXAMINER	
CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE			MOISE, EMMANUEL LIONEL	
BOSTON, M			ART UNIT	PAPER NUMBER
·			2136	5
			DATE MAILED: 04/22/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>▶</b> 7					
Office Action Summary		Application No.	Applicant(s)		
		09/996,252	WENG, LIH-JYH		
		Examiner	Art Unit		
		Emmanuel L. Moise	2136		
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address		
THE   - External after - If the - If NO - Failu	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a): In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed  rs will be considered timely.  the mailing date of this communication.  D (35 U.S.C. & 133)		
Status					
1)	Responsive to communication(s) filed on 26 M	arch 2002			
		action is non-final.			
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Dispositi	on of Claims				
5)⊠ 6)□ 7)□	Claim(s) <u>1-13</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdray  Claim(s) <u>1-6,12 and 13</u> is/are allowed.  Claim(s) <u>7-11</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.			
Applicati	on Papers		•		
10)⊠ ′	The specification is objected to by the Examiner The drawing(s) filed on <u>27 November 2001</u> is/ar Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Ex-	re: a) $\square$ accepted or b) $\square$ object drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority u	nder 35 U.S.C. § 119				
a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior application from the International Bureau ee the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage		
Attachment	(s)				
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
3) 🔯 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date 4.	Paper No(s)/Mail Da 5) Notice of Informal Pa	ite atent Application (PTO-152)		

Application/Control Number: 09/996,252

Art Unit: 2136

#### DETAILED ACTION

1. Claims 1-13 are presented for examination.

### Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 7-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 7 and 9, in line 6, the language "and/or" renders claims 7-11 vague and indefinite.

## Claim Rejections - 35 USC § 101

4. Claims 7-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 7-11, the claimed invention is not limited to a practical application. Steps A through F in claim 7, serving as example, are a sequence of mathematical operations for calculating remainders wherein the step of manipulating further includes the steps of multiplying, adding, and shifting. Viewed as a whole, the claimed invention merely converts one set of numbers into another set of numbers.

Also, the Freeman-Walter-Abele test has been relied upon in analyzing the claimed invention. Under the test, the claimed invention is rejected as a non-statutory method claim because it is a method directed solely to solving a mathematical operation. Nothing technological is accomplished.

Application/Control Number: 09/996,252

Art Unit: 2136

Furthermore, analyzing the claimed invention according to the principles set forth in State St. Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F. 3d 1368, 1373, 47 USPQ2d 1596, 1600 (Fed. Cir. 1998), the Examiner finds that the remainders including the manipulation of such remainders produced by the implementation of the claimed steps do not produce a "useful, concrete and tangible result." Accordingly, claims 7-11 are rejected as claiming non-statutory subject matter.

#### Allowable Subject Matter

- 5. Claims 1-6 and 12-13 are allowable over the prior art of record.
- 6. Claims 7-11 would be allowable if amended to overcome the 35 U.S.C. 112, second paragraph, and the 35 U.S.C. 101 set forth above.
- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5,140,596 (Welton, Jr.)

5,185,711 (Hattori)

5,935,269 (Kodama et al.)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel L. Moise whose telephone number is (703)305-9763. The examiner can normally be reached on M-W and F-Sat (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (703)305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/996,252

Art Unit: 2136

Page 4

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Emmanuel L. Moise Primary Examiner Art Unit 2136